

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/ZA2004/000007

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01J23/28 B01J23/30 C10G29/20 C07C7/148 C07C67/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01J C10G C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 415 480 A (MURRELL LAWRENCE L ET AL) 15 November 1983 (1983-11-15) claim 1 examples 1,2; table 1	1-5
X	US 4 560 797 A (ARMOR JOHN N ET AL) 24 December 1985 (1985-12-24) example 1; tables 1,3	1-5
X	EP 0 319 065 A (SHELL INT RESEARCH) 7 June 1989 (1989-06-07) examples 1,2	1-5
X	US 3 846 288 A (CHUN S ET AL) 5 November 1974 (1974-11-05)  the whole document	1,2, 4-14,18, 19,22-26
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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\*A\* document defining the general state of the art which is not considered to be of particular relevance

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\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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\*G\* document member of the same patent family

Date of the actual completion of the international search

2 June 2004

Date of mailing of the international search report

09/06/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 968 149 A (MORESCHINI LUCIANO ET AL) 6 July 1976 (1976-07-06) the whole document	1-5
A	DE 100 12 163 A (LINDE AG) 20 September 2001 (2001-09-20)	
A	WO 98/25876 A (SASOL CHEMICALS EUROP LTD ; VERMAAK ESTER JOHANNA (ZA); JAGER GEERT GU) 18 June 1998 (1998-06-18)	

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Information on patent family members

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